AMENDMENTS TO THE CLAIMS

Please amend claims 79, 118, 124 and 126 as set forth below.

Listing of Claims

1-78. (Canceled)

79. (Currently Amended) A method for preventing leakage into a perigraft space between an endovascular graft that has been implanted in the lumen of a blood vessel of a human or veterinary patient and an adjacent portion of the blood vessel wall, said method comprising the steps of:

(A) providing a device comprising a solid member having expansile polymeric material disposed thereon, said expansile polymeric material being i) initially in a non-expanded state wherein a quantity of the polymeric material occupies a first volume and b) subsequently expandable to an expanded state wherein said quantity of the polymeric material occupies a second volume larger than the first volume and absorbs blood;

(B) inserting a cannula into said lumen of the blood vessel;

(C) disposing said endovascular graft over a distal end of said cannula and over said adjacent portion of said blood vessel wall such that said distal end of said cannula is captured between an external surface of said endovascular graft and a wall of said blood vessel that mates with said external surface of said endovascular graft;

(D) introducing said device through said cannula and into a perigraft space between said endovascular graft and said blood vessel wall while said expansile polymeric material is substantially in its non-expanded state;

(E) allowing said polymeric material to expand to its expanded stated within said perigraft space such that said device substantially fills said perigraft space.

80. (Previously Presented) A method according to claim 79 wherein i) the adjacent portion of the blood vessel wall is aneurysmic; ii) the endovascular graft is implanted within the blood vessel such that it extends through the aneurysmic portion of the blood vessel and defines a perigraft space between the graft and the aneurysmic wall of the blood vessel; and, iii) the device is introduced into the perigraft space where the expansile polymeric material expands to substantially fill the perigraft space.

81. (Previously Presented) A method according to claim 80 wherein the total volume of non-expanded expansile polymeric material introduced in Step D is predetermined to substantially fill the perigraft space after it has been allowed to expand in Step E.

82. (Previously Presented) A method according to claim 79 wherein the expansile polymeric material is radiopaque.

83. (Previously Presented) A method according to claim 82 wherein the expansile polymeric material is rendered radiopaque by the incorporation of radiopaque monomers.

84. (Previously Presented) A method according to claim 79 wherein the polymeric material expands to its expanded state when the pH of its environment is a physiological pH of about 7.4.

85. (Previously Presented) A method according to claim 79 wherein the polymeric material is in the form of pellets when introduced through the cannula.

86. (Previously Presented) A method according to claim 79 wherein the solid member is an elongate member.

87. (Previously Presented) A method according to claim 86 wherein the solid member is filamentous.

88. (Previously Presented) A method according to claim 86 wherein a plurality of pieces of the polymeric material are disposed at spaced-apart locations on said elongate solid member.

89. (Previously Presented) A method according to claim 88 wherein the device further comprises coil spacers disposed on said solid member between pieces of the expansile polymeric material.

90. (Previously Presented) A method according to claim 79 wherein the solid member is formed of platinum.

91. (Previously Presented) A method according to claim 79 wherein the solid member is formed of platinum and tungsten.

92. (Previously Presented) A method according to claim 79 wherein the solid member is formed of wire.

93. (Previously Presented) A method according to claim 79 wherein the solid member is formed of polymeric material.

94. (Previously Presented) A method according to claim 93 wherein the solid member is formed of a polymer filament.

95. (Previously Presented) A method according to claim 94 wherein the solid member is formed of a polyvinyl alcohol filament.

96. (Previously Presented) A method according to claim 79 wherein the solid member is biased to a coiled configuration.

97. (Previously Presented) A method according to claim 79 wherein the cannula is advanced through the lumen of a catheter.

98. (Previously Presented) A method according to claim 97 wherein the catheter is a microcatheter.

99. (Previously Presented) A method according to claim 98 wherein the microcatheter has a lumen of 0.005-0.050 inch diameter.

100. (Previously Presented) A method according to claim 79 wherein the device is initially attached to a delivery member by way of a detachable connection, said delivery member being useable to advance the device into the perigraft space, said detachable connection being thereafter detachable such that the delivery member may be retracted into the cannula while the device remains in the perigraft space.

101. (Previously Presented) A method according to claim 79 wherein the polymeric material expands more rapidly as the pH of its environment increases.

102. (Previously Presented) A method according to claim 79 wherein the polymeric material is a hydrogel.

103. (Previously Presented) A method according to claim 79 wherein the polymeric material is porous when in its expanded state.

104. (Previously Presented) A method according to claim 103 wherein the porous polymeric material, when substantially fully expanded, has pores of about 50-1000 microns in diameter.

105. (Previously Presented) A method according to claim 103 wherein the porosity of the polymeric material, when substantially fully expanded, is at least about 50%.

106. (Previously Presented) A method according to claim 103 wherein the porosity of the polymeric material, when substantially fully expanded, is between about 50% and about 95%.

107-110. (Canceled)

111. (Previously Presented) A method according to claim 79 wherein the cannula is substantially rigid.

112. (Previously Presented) A method according to claim 79 wherein the cannula is substantially flexible.

113. (Previously Presented) A method according to claim 79 wherein the cannula comprises a metal tube.

114. (Previously Presented) A method according to claim 79 wherein the cannula comprises a plastic tube.

115. (Previously Presented) A method according to claim 79 wherein the method is performed after an endoleak has been detected as a means of treating the endoleak.

116. (Previously Presented) A method according to claim 79 wherein the method is performed before an endoleak has been detected as a means for preventing an endoleak from occurring.

117. (Previously Presented) A method according to claim 79 wherein Step B comprises: advancing a catheter to a first position within the patient's vasculature; and, advancing the cannula through the catheter to a second position.

118. (Currently Amended) A method of treating a vessel within a body comprising:

positioning a distal end of a delivery device in proximity of a target location within said vessel;

expanding a graft at said target location within said vessel such that a perigraft space is formed, said graft expanding over said distal end of said delivery device and thereby holding said distal end of said delivery device by pressing said distal end between an external surface of said graft and an internal surface of said vessel; and

introducing an expansile material into said perigraft space through said delivery device;

expanding said expansile material within said perigraft space.

119. (Previously Presented) The method of claim 118, wherein said positioning a distal end of a delivery device in proximity of a target location within said vessel further comprises positioning a cannula adjacent an aneurysmic wall.

120. (Previously Presented) The method of claim 119, wherein said expansile material is disposed on a solid member.

121. (Previously Presented) The method of claim 119, wherein said expansile material is disposed on a coil.

122. (Previously Presented) The method of claim 119, wherein said expansile material is a hydrogel.

123. (Previously Presented) The method of claim 119, wherein said expansile material expands at a pH of about 7.4.

124. (Currently Amended) A method of treating an aneurysm of a vessel comprising:

advancing a distal end of a cannula to an aneurysm;

positioning an endovascular graft near said aneurysm;

anchoring said endovascular graft to a wall of the vessel over said aneurysm;

capturing said cannula between an outside surface of said graft and an inside surface of ~~said graft and~~ said vessel wall;

delivering an expansile material into said aneurysm through said cannula.

125. (Previously Presented) The method of claim 124, wherein said advancing a distal end of a cannula to an aneurysm further comprises advancing a catheter to a position in proximity to the aneurysm.

126. (Currently Amended) The method of claim 124, wherein said delivering an expansile material into said aneurysm through said cannula further comprises delivering a hydrogel into the aneurysm ~~perigraft space~~.

127. (Previously Presented) The method of claim 124, wherein said delivering an expansile material into said aneurysm through said cannula further comprises delivering the expansile material disposed on a coil.

128. (Previously Presented) The method of claim 124, wherein said delivering an expansile material into said aneurysm through said cannula further comprises delivering a pH sensitive hydrogel.